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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,361	09/24/2001	Masakazu Tanaka	12-007	6343
23400	7590	09/08/2004		
POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE SUITE 10 RESTON, VA 20190			EXAMINER WRIGHT, WILLIAM G	
			ART UNIT 1754	PAPER NUMBER

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/960,361	TANAKA ET AL.
	Examiner	Art Unit
	William G. Wright SR.	1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on May 25 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 2-7,12,13,15,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 2-7,12,13,15,19 and 20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date Oct. 06 2003.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

Applicant's arguments against all of the outstanding rejections have been found persuasive. Accordingly all previous rejections of record are withdrawn.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 2-7, 12, 13, 15 and 19-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Beauseigneur et al. '570 in view of Japan 62-004441.

The primary reference Beauseigneur teaches automotive exhaust gas catalysts. Said catalysts are taught to contain microcracks in the Abstract and at claim 1 and claim 3. The teaching of cordierite is found at Examples 4 and 5. The teaching at column 2 line 54 et seq. of the desire to use microcracks to contribute to the higher resistance to thermally induce cracking by allowing the thermally expanding material to reduce their widths is noted. The desire to not fill the microcracks is taught throughout the primary reference at column 2 line 54 et seq. to

column 3 line 1 et seq. Column 4 line 7 et seq. teaches the use of microcrack ceramic material.

The teaching of nanoparticles is found at column 6 line 30 and at claims 15, 32 and 35.

Beauseigneur fails to teach the concept of the direct depositing of the catalyst elements on the ceramic support.

Japan '441 teaches the concept of the direct support of the catalytic elements on the ceramic support at claim 1. The supporting reference teaches the desire to manufacture a cordierite ceramic catalyst support useful in auto gas treatment. This teaching is found at page 3 of the translation, line 1 et seq. The teaching of a wash coat on cordierite causing the low expansion of said cordierite to be lost is found at page 4 line 8 et seq. The teaching of the direct depositing of the catalyst elements on the cordierite ceramic is found at page 5 line 15 et seq. The specific catalytic elements are taught at page 9 line 9 et seq.

Both references teach the same supports and the same catalytic elements for the same auto gas treatment utility. Beauseigneur teaches a strong desire to not fill the microcracks with the catalyst and thus to keep the thermal strength as is taught at column 2 line 54 et seq. At said column 2 lines 64 and 65 of Beauseigneur U.S. Patent 4,551,517 and U.S. Patent 4,532,228 are each cited to further teach the protecting of the all important microcracks from being filled and destroying the desired thermal properties of the cordierite. The teaching is well established that the microcracks are a desirable feature and should be maintained for thermal expansion reasons. The supporting reference Japan '441 teaches that the ceramic support is made with the preserving of microcracks and the direct placement of the catalysts on the ceramic support. The motivation to preserve the microcracks found in the Beauseigneur reference would make it obvious to use the teachings of the supporting reference Japan '441 to provide the feature of protecting or producing microcracks and putting the catalytic elements directly on the support without the use of a wash coat. The direct application of the catalytic elements on the microcrack ceramic support is the known desired result in all cases. It was not known how to do this until the

teachings of Japan '441 are incorporated into the primary reference. The desire not to have to use wash coat is a well established feature of catalyst manufacture and with the teachings of Japan '441 a practitioner is able to modify the Beauseigneur patent's teaching to accomplish this.

Claims 2-7, 12, 13, 15 and 19-20 are provisionally rejected under 35 U.S.C. § 103(a) as being obvious over copending Application No. 09/546,227 which has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. § 102(e) if patented. This provisional rejection under 35 U.S.C. § 103(a) is based upon a presumption of future patenting of the conflicting application.

The copending application 09/546,227 teaches auto gas catalysts, cordierite, replaced elements, fine cracks and direct placement of the catalysts on the support. These teachings are found respectfully at page 1 line 26, claim 87, claim 58, claim 34 and claim 8.

The instant claimed invention is obvious from the disclosures of the application 09/546,227 where all of the instant claimed features are found.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131.

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2-7, 12, 13, 15 and 19-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-103 of copending application Serial No. 09/546,227. Although the conflicting claims are not identical, they are not patentably distinct from each other because they overlap in scope with subject matter claimed.

This is a *provisional* obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William G. Wright, Sr. whose telephone number is (571) 272-1361. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (571) 272-1558. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for the regular communications and (703) 872-9311 for after final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WGW SR.

W. G. Wright, Sr.:cdc  
September 1, 2004



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